

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
July 2019**

Licence 2684 RRR	File # 1071.10	Final Effluent 24 Hour Composite							Final Effluent Grab Sample			
		TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
1-Jul-19	128.1	12	18	5	4,330	3.61	3.6	39.9	18.4	6.85	<10	<10
2-Jul-19	141.6	6	16	6	4,348	3.03	3.6	40.0	18.4	6.82	<10	10
3-Jul-19	149.3	10	25	8	4,867	4.01	3.6	40.2	18.4	6.70	40	10
4-Jul-19	147.5	10	19	6	4,882	3.81	3.7	40.5	18.5	6.76	590	620
5-Jul-19	144.7	10	17	7	5,179	4.03	3.7	40.7	18.7	6.71	60	70
6-Jul-19	133.6	12	19	6	4,928	4.10	3.7	40.8	18.6	6.80	70	50
7-Jul-19	128.7	9	21	6	4,749	3.62	3.7	40.9	19.0	6.77	170	130
8-Jul-19	143.1	10	18	6	5,095	3.58	3.7	41.2	19.0	6.68	40	40
9-Jul-19	295.6	107	55	>34	5,173	1.95	3.7	41.4	19.0	6.68	20	10
10-Jul-19	580.4	51	24	14	4,620	0.20	3.6	40.6	19.0	6.97	(>24,200)	(>24,200)
11-Jul-19	233.3	6	7	5	4,642	1.04	3.5	40.0	19.1	6.94	410	700
12-Jul-19	185.5	8	8	4	4,953	2.14	3.4	39.8	19.3	6.87	230	160
13-Jul-19	161.7	20	14	8	4,334	2.85	3.4	39.7	19.3	6.82	120	160
14-Jul-19	354.9	32	24	12	4,294	1.36	3.3	38.9	19.8	6.75	(>24,200)	(>24,200)
15-Jul-19	306.2	21	14	7	3,919	1.27	3.2	38.3	20.0	6.94	2,760	1,370
16-Jul-19	209.8	11	10	4	4,951	2.47	3.1	38.1	19.7	6.82	40	80
17-Jul-19	198.1	13	18	4	7,191	3.28	3.1	39.1	19.9	6.86	60	120
18-Jul-19	222.7	22	21	11	6,858	3.18	3.2	39.4	20.0	7.76	60	50
19-Jul-19	191.9	14	13	8	4,643	2.49	3.1	39.3	20.4	6.75	470	460
20-Jul-19	161.8	14	14	8	4,255	3.26	3.2	39.1	19.7	6.66	(250)	(190)
21-Jul-19	160.9	12	13	6	4,425	3.09	3.2	39.1	19.3	6.74	<10	20
22-Jul-19	171.8	14	14	8	4,363	3.07	3.3	39.4	19.2	6.74	20	30
23-Jul-19	173.2	16	15	7	4,571	3.70	3.4	39.5	19.7	6.77	80	200
24-Jul-19	160.4	20	16	7	4,603	3.44	3.4	39.3	20.2	6.74	20	20
25-Jul-19	162.9	16	22	5	5,113	3.30	3.5	39.3	20.2	6.79	20	40
26-Jul-19	178.8	18	23	7	5,131	3.41	3.5	39.0	20.0	6.79	20	60
27-Jul-19	142.7	15	16	5	3,795	3.18	3.5	38.9	20.0	6.70	130	140
28-Jul-19	139.0	10	23	5	4,185	3.50	3.5	38.5	19.8	6.74	50	10
29-Jul-19	145.1	12	18	4	4,206	3.30	3.6	38.1	20.1	6.71	30	<10
30-Jul-19	145.7	13	18	6	4,544	4.08	3.6	37.9	19.5	6.79	150	50
31-Jul-19	149.5	9	13	4	4,843	4.20	3.7	37.8	19.9	6.79	170	160
Max:	580.4											
Min:	128.1											
Average:	191.9	18	18	8	4,774	3.02			19.4	6.81		
Total Flow:	5948.1											
Geo.Mean:											63	61

Notes:

- (1) Effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentrations
- (2) nr - not recorded or no result; na - not analyzed; ns - no sample
- (3) Where value is expressed as less than (<), the value is halved and used in the calculations
- (4) * = 30 day rolling average
- (5)** Flow, highlighted in bold, in excess of 380 ML/D per clause 26 of Licence 2684RRR

- (6) Bracketed Coliform results not used in the Geometric Mean calculation
- (7) Raw wastewater flows in excess of 400 ML/D will by-pass the secondary process and flows in excess of 675 ML/D will cause raw sewage to by-pass the plant